



# Sturgeons in Europe

Beate Striebel-Greiter, WWF CEE

Jörn Gessner, Leibniz Institute of Freshwater Ecology and  
Inland Fisheries IGB, World Sturgeon Conservation Society

# Europe's endangered sturgeons

- Least Concern
- Endangered
- Extinct in the wild
- Near Threatened
- Critically Endangered
- Extinct
- Vulnerable




## Black Sea



 **Beluga sturgeon**  
(*Huso huso*)



 **Danube or Russian sturgeon**  
(*Acipenser gueldenstaedtii*)



 **Ship sturgeon**  
(*Acipenser nudiiventris*)\*



 **Stellate sturgeon**  
(*Acipenser stellatus*)




 **Sterlet sturgeon**  
(*Acipenser ruthenus*)




 **European Atlantic sturgeon**  
(*Acipenser sturio*)

## Adriatic Sea



 **Beluga sturgeon**  
(*Huso huso*)



 **European Atlantic sturgeon**  
(*Acipenser sturio*)



 **Adriatic sturgeon**  
(*Acipenser naccarii*)


## Baltic Sea



 **Atlantic sturgeon**  
(*Acipenser o. oxyrinchus*)

## N-E Atlantic



 **European Atlantic sturgeon**  
(*Acipenser sturio*)

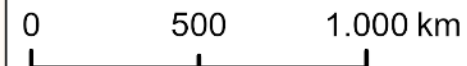
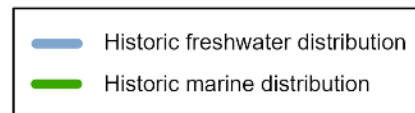
\* Ship sturgeon (*Acipenser nudiiventris*) is extinct in the Danube.



# Sturgeon Rivers

## Once upon a time in Europe

historic presence  
documented in 78 rivers

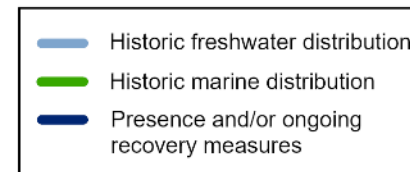




## Today:

Sturgeons survived at low population levels only in very few rivers (Gironde, Po, Danube, Dniester, Dnieper, Rioni)

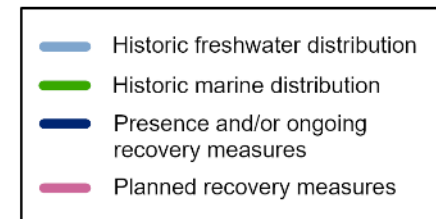
.... and are slowly coming back in other rivers due to active recovery measures (exp: Elbe, Oder, Vistula, Narva,..)





## And tomorrow?

Even more recovery programs are in the planning (Rhine, Ebro, and several Baltic rivers.....)



0 500 1.000 km



Many countries involved – requiring international cooperation

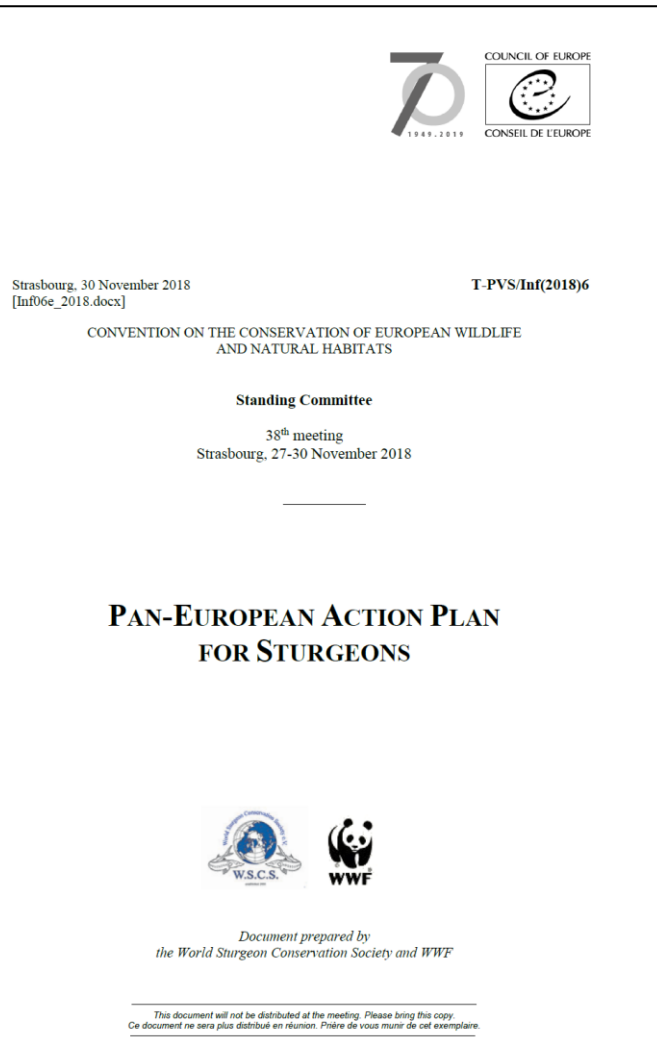
# STURGEON RECOVERY MEASURES IN EUROPE

Conservation measures are ongoing in many countries but coordination in joint river or sea basins is largely lacking.



# Pan-European Action Plan for Sturgeons

- A guiding framework for conservation measures
- For 44 Bern Convention signatory states, unanimously adopted 2018
- For the period 2019 -2029
- Endorsed for implementation under the EU Habitats Directive
- Commitment included in the ministerial declaration of ICPDR
- encourages national implementation strategies and cooperation with basin countries
- Baltic Sea Sturgeon Action Plan under Helcom (2019)
- Ukraine National Action Plan



# Coordination of the implementation

- Secretariat of the Bern Convention has a mandate to coordinate the implementation
- all range Contracting Parties to appoint a National Focal Point with a relevant mandate to
  - ensure the interface with the Secretariat and the network of the Bern Convention,
  - coordinate and involve national sectors and stakeholders
  - Coordinate with neighbouring countries in a joint basin.



# **PANEUAP**

FOR STURGEONS

PANEUAP  
**ACTION 1**

**STOP  
POACHING  
& MINIMISE  
BYCATCH**

PANEUAP  
**ACTION 2**

**CAPTIVE  
BREEDING &  
RELEASE**

PANEUAP  
**ACTION 3**

**IDENTIFY  
PROTECT &  
RESTORE  
HABITATS**

PANEUAP  
**ACTION 4**

**RE-ESTABLISH  
MIGRATION  
ROUTES**

PANEUAP  
**ACTION 5**

**MONITOR  
WILD STOCKS**

PANEUAP  
**ACTION 6**

**STOP  
ILLEGAL  
TRADE**

PANEUAP  
**ACTION 7**

**SECURE  
REGULATIONS  
& FUNDING**

PANEUAP  
**ACTION 8**

**MONITOR &  
EVALUATE  
IMPLEMEN-  
TATION**

PANEUAP  
**ACTION 9**

**BUILD  
STAKEHOLDER  
SUPPORT**

[Link to video](#)



A person is seen from behind, sitting on a reflective floor and looking into a large aquarium tank. The tank contains several large, detailed models of sturgeon fish. One model is swimming near the top, while others are positioned at different depths. The background of the tank features a rocky, underwater-like environment. The text "Support for the Implementation of the PANEUAP" is overlaid on the upper part of the image.

Support for the Implementation of the PANEUAP

European Commission service contract  
(09.0201/2022/885601/SER/D.3)

# Technical Guidance for implementation



## Final Results

- **Technical Guidance published by EC**
  - [Habitat Monitoring](#)
  - [Population Monitoring](#)
  - [EX-Situ Conservation Measures](#)

Adoption through the Standing Committee of the Bern Convention with

[Recommendation No. 222 \(2024\)](#) on habitat monitoring

[Recommendation No. 223 \(2024\)](#) on population monitoring

[Recommendation No. 224 \(2024\)](#) on *ex situ* conservation

*To use guidance in conservation measures*

*to raise awareness among stakeholders to put into practice*

*To use as criteria to develop and [fund future projects](#)*





## Review of Bycatch Prevention and Mitigation Measures for Sturgeons

SUPPORT DOCUMENT FOR THE IMPLEMENTATION OF  
THE PAN-EUROPEAN ACTION PLAN FOR STURGEONS



Environment

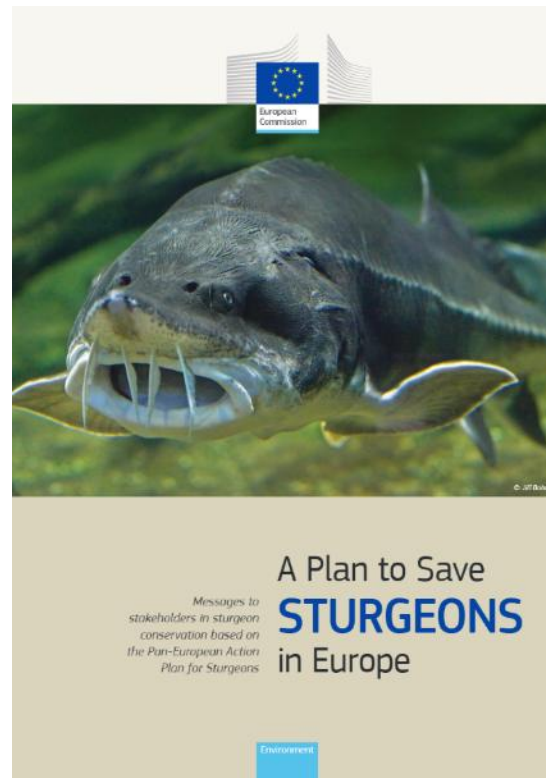
# Bycatch Review - Content

- First review on sturgeon bycatch ever
- European and N-American literature analysed
- Includes
  - simple examples of communication tools
  - for exchange with fishers
  - from different European regions.

# Summary of the mid –term review of PANEUAP across 18 range countries

- **50% of countries have a national strategy**
- Legal protection in place but for 8 countries **poaching remains an issue**
- **Bycatch** is a problem for all countries but is **not** tackled jointly
- All 18 countries state that **release programs are necessary!** Yet in 10 countries an *ex situ* program is lacking
- **Habitat identification** is **in progress** but **protection** of habitats is largely lacking and **restoration** basically not happening
- Obstacles to migration are identified but **passage is not facilitated**
- **Monitoring programs** in place in only 4 countries (in progress for five)
- **Coordination** of monitoring between countries is lacking





State of implementation of the Pan-European Action Plan for Sturgeons in

- [Lower Danube & Black Sea](#)
- [Upper/Middle Danube](#)

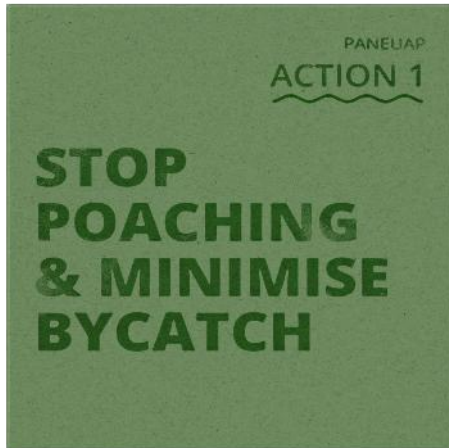
[Factsheet with messages to stakeholder](#) ins 18 languages

[Video on the Pan-European Action Plan](#) – featuring the Danube



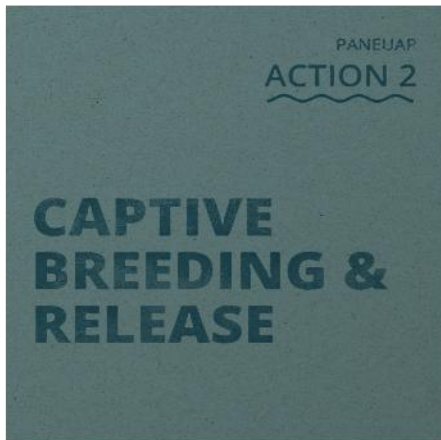


# PANEUAP implementation in the Danube



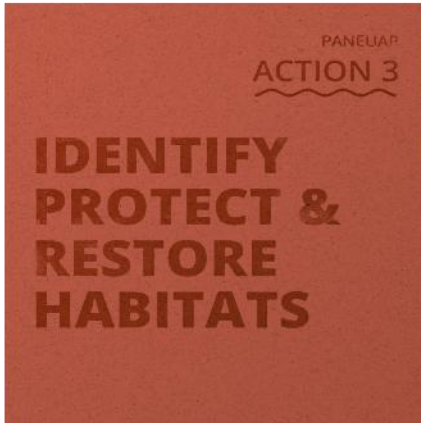
- Sturgeon fishing bans in place in all Danube and Black Sea countries except for Austria, Slovakia and Croatia
- Poaching remains a documented issue in the Lower Danube – enforcement is improving and data collection ongoing
- Bycatch is an issue in the Lower Danube and Black Sea – recording of bycatch reports mandatory but not much official data. Info stems from voluntary reports of fishers.
- [General Fisheries Commission for the Mediterranean \(Rec GFCM/47/2024/11\)](#) binding decision to ban sturgeon fishing in the Black Sea, eliminate sturgeon bycatch, enforce regulations, data collection and awareness measures

# PANEUAP implementation in the Danube



- Moving from single uncoordinated releases to a basin wide programme under LIFE Boat Project (until 2030)
- Broodstock for 4 species established in AT and HU – joint management in place
- Releases ongoing (1.6 Mio until 2030)
- Monitoring of impact of released fish still only on very low scale and needs continuation after LIFE Boat.

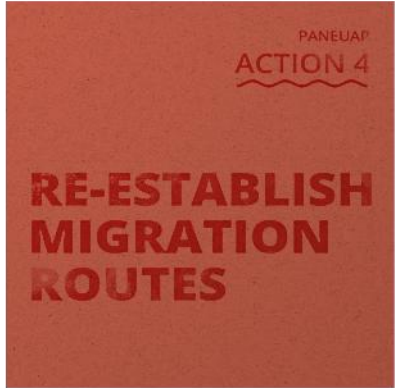
# PANEUAP implementation in the Danube



- First static basin wide maps of potential/confirmed habitats available (MEASURES (DRP) + EC contract)
- First cooperation with Joint Danube Survey
- Moving towards a basin wide habitat inventory in frame of ICPDR – updatable and sustainable after project terminated (MonStur)
- Still substantial knowledge gaps on habitats (locations and conditions) – research efforts are ongoing (MonStur)
- Identified habitats lack explicit protection

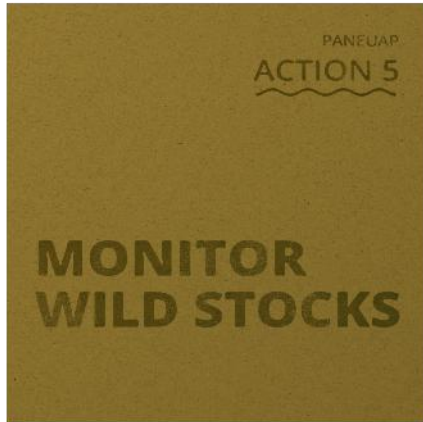


# PANEUAP implementation in the Danube



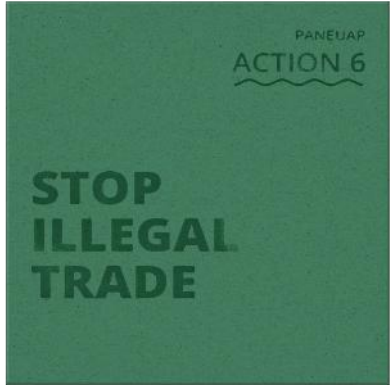
- Priority barriers in the basin identified (Iron Gates + Gabčíkovo)
- Feasibility studies completed or ongoing (WePass + LIFE Living Rivers)
- No barrier in the basin has an effective passage designed for sturgeons so far (upstream and downstream)
- Threat of new migration obstacle (Turnu-Magurele)

# PANEUAP implementation in the Danube



- So far single projects have provided information, data not comparable, scattered among institutions and countries, hardly accessible after project funding ended
- LIFE Boat partners have started to work on a joint field protocol
- First inclusion with Joint Danube Survey – limited to eDNA analysis
- Moving towards a joint population database in the frame of ICPDR's Trans National Monitoring Network – updatable and sustainable after project terminated (MonStur)
- Regular long-term monitoring of population parameters only in few countries (i.e. AT, RO) – room for improvement

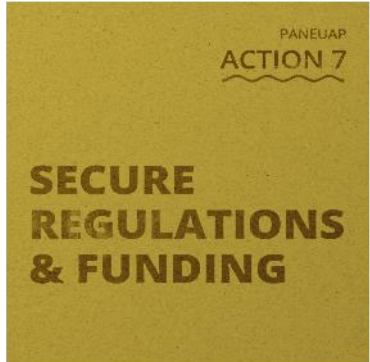
# PANEUAP implementation in the Danube



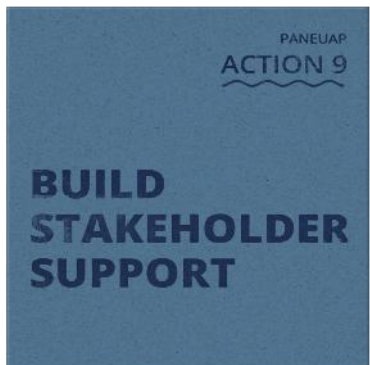
- Existence of illegal trade documented for Lower Danube countries (WWF market research)
- Capacity building for enforcement agencies took place
- Controls are rare and limited on CITES label existence
- No controls include a verification of caviar label with actual content of caviar container
- No controls regarding wild source of meat



# PANEUAP implementation in the Danube



- National Action Plans lacking, with exception of UA and HU
- UA is the only country with regular stakeholder meetings to implement the AP
- Process to establish national/transboundary Action Plans for DE, AT, SK and HU ongoing (MonStur)
- **Important to include sturgeon relevant measures in National Biodiversity Strategies and National Nature Restoration Plans → National programming of EU funds**



- DSTF as EUSDR PA6 Task Group
- EUSDR (PA6, PA4, PA5, PA1a,...)
- ICPDR
- National sturgeon focal points to engage national level stakeholders